
Domain 6: Requirements for Laboratory Response Network – Chemical

March 2019
Overview

The Laboratory Response Network for Chemical Threats (LRN-C) is a national network of local and state public health laboratories with capabilities for responding to chemical terrorism and other public health emergencies. LRN-C laboratories provide critical CDC surge capacity as well as local response capabilities within their respective jurisdictions. There are currently 54 LRN-C laboratories located in all 50 states, three localities (Los Angeles County, New York City, and Washington D.C.), and one U.S. territory (Puerto Rico). All LRN-C laboratories have the capacity to monitor chemical exposures at their onset, assist local hospitals and first responders with sample accessioning, pack and ship to other network laboratories, and serve as a CDC sentinel site for large chemical emergencies.

Purpose

CDC has identified nine core methods and four additional methods for detecting and measuring a diverse range of chemical threat agents in clinical samples. Participating LRN-C laboratories are designated as either Level 1, Level 2, or Level 3. PHEP recipients must work with public health laboratory staff to ensure adherence to the LRN-C requirements and maintain the tools and resources necessary for LRN-C participation.

Programmatic Requirements

Per the 2019-2024 PHEP notice of funding opportunity (NOFO), PHEP recipients must work with public health laboratory staff to ensure adherence to the LRN-C requirements. Recipients must work with public health laboratory staff to ensure adherence to the following requirements.

- Meet PHEP program benchmarks for LRN-C exercising and proficiency testing.
- Meet LRN-C basic membership requirements.
- Increase secured data messaging and laboratory information management system (LIMS) capabilities.
- Take part in chemical threat program response reporting.
- Successfully complete the annual 24/7 emergency contact drill.
- Participate in LRN-C equipment replacement.

LRN-C Membership Requirements

LRN-C Level 3 Membership Requirements

- Submit a signed LRN-C confidentiality agreement for all chemical threat program staff.
- Stock sample collection and shipping supplies for a minimum of 500 patient samples.
- Participate successfully in at least one LRN-C sample packaging and shipping (SPAS) exercise per budget period.
- Conduct sample packaging and shipping training and outreach with local hospitals and poison control centers.
- Participate in annual response coordination exercises with local preparedness partners.
- Establish written protocols to coordinate with hospitals, first responders (police, fire, hazardous materials teams), and civil support teams.
- Attend monthly conference calls administered by the CDC LRN-C technical program.
- Ensure at least one laboratory member maintains a working digital certificate for access to CDC electronic results-reporting systems.
- Maintain Clinical Laboratory Improvement Amendments (CLIA) certification.

LRN-C Level 2 Membership Requirements
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- Meet all Level 3 requirements.
- Successfully participate in all CDC-sponsored emergency response exercises.
- Maintain LRN-C ‘Qualified’ status for at least four LRN-C core methods posted on the LRN-C secure website.
- Stock response materials and instrument consumables for the analysis of at least 500 patient samples for each qualified analysis method.

**LRN-C Level 1 Membership Requirements**

- Meet all Level 2 and Level 3 requirements.
- Successfully participate in all CDC-sponsored emergency response exercises.
- Maintain LRN-C ‘Qualified’ status for all LRN-C core and additional methods posted on the LRN-C secure website.
- Stock response materials and instrument consumables for the analysis of at least 1,000 patient samples for each qualified analysis method.
- Maintain LRN-C proficiency testing and materials program subscriptions for all LRN-C core and additional methods.
- Obtain maintenance agreements for all LRN-C equipment valued at more than $10,000.
- Ensure equipment redundancy for all gas chromatography-mass spectrometry (GC/MS), high performance liquid chromatography (LC/MS), Inductively coupled plasma mass spectrometry (ICP-MS) equipment platforms.
- Maintain high throughput equipment capabilities such as 1) LC/MS automated injectors for all LRN-C core and additional methods; and 2) automated liquid handling workstation for both 96 well and cartridge capabilities.

**Laboratory Response Network (LRN) Resources**

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<td>General overview of the Laboratory Response Network for Chemical Threats</td>
<td><a href="https://emergency.cdc.gov/lrn/chemical.asp">https://emergency.cdc.gov/lrn/chemical.asp</a></td>
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<tr>
<td>LRN-C Level 3 Resource Handbook</td>
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